

### REMARKS

Claims 1, 4, 8 and 18 were presented for examination, are pending and are rejected. Reconsideration is respectfully requested.

#### The 35 U.S.C. § 112 First Paragraph Rejections

Claims 1, 4, 8 and 18 are rejected as failing to comply with the written description requirement.

The matter amended into the claims in the last amendment and complained of by the Examiner as lacking enablement has been removed. Therefore the rejection should be withdrawn.

#### The 35 U.S.C. § 102 Rejections

Claims 1 and 18 are rejected as being anticipated by Droege. The rejection is respectfully traversed.

As indicated in the attached Declaration under 37 CFR §1.132, which is incorporated herein by reference, claim 1 of the present patent application includes a drying step that reduces surface tensile forces so that the organic aerogel and the preformed polymer foam/fiber-mat that it encapsulates, are essentially monolithic. After pyrolysis, they remain essentially in contact at their interfaces to form a monolithic glassy carbon material. The Droege reference teaches a drying method that does not reduce surface tensile forces adequately to produce a monolithic composite,

nor to form an essentially monolithic composite when pyrolyzed. The reference does not teach how to produce an essentially monolithic foam/mat aerogel composite. Claim 18 should be allowable at least because it depends from claim 1. Therefore the rejection should be withdrawn.

#### The 35 U.S.C. § 103 Rejections

Claims 4 and 8 are rejected as being unpatentable over Droege. The rejection is respectfully traversed.

Claims 4 and 8 should be allowable at least because they depends from claim 1, which should be allowable over Droege as discussed above. Therefore the rejection should be withdrawn.

Claims 1, 4, 8 and 18 are rejected as being unpatentable over Pekala et al in view of Kaschmitter et al.. The rejection is respectfully traversed.

As indicated in the attached Declaration under 37 CFR §1.132, which is incorporated herein by reference, in both Pekala and Kaschmitter, the pore size is required to be large enough so that fluid (electrolyte) can flow. Thus, neither reference teaches a method for producing a monolithic foam/mat aerogel composite. The composites produced by the Pekala and Kashmitter patents do not exhibit the same bulk properties as a monolithic aerogel because the average pore size is relatively large. In fact, such large pores, which enable easy fluid transport through the material, are

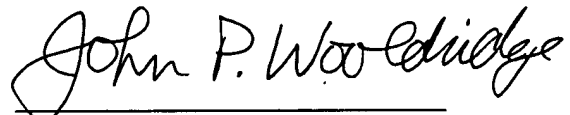
essential for the application of energy storage. Therefore the rejection should be withdrawn.

Conclusions

It is submitted that this application is in condition for allowance based on claims 1, 4, 8 and 18 in view of the amendments thereto and the foregoing comments.

If any impediments remain to prompt allowance of the case, please contact the undersigned at 808-875-0012.

Respectfully submitted,

A handwritten signature in black ink that reads "John P. Wooldridge". The signature is written in a cursive style with a horizontal line underneath the name.

John P. Wooldridge  
Attorney for Applicant  
Registration No. 38,725

Dated: January 20, 2005